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| 10/581,294 | 06/01/2006 | Sudhir Paul | D6812 | 3697 |

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| EXAMINER | |
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| DUFFY, PATRICIA ANN | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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| | | |
|---|---|---|
| In re Application of: Paul et al | : | |
| Serial No: 10/581,294 | : | DECISION |
| Filed: June 1, 2006 | : | ON |
| Attorney Docket No: D6812 | : | PETITION |
| Title: Proteolytic and Covalent Antibodies | : | |

This letter is in response to the Petition under 37 C.F.R. 1.144 filed on May 11, 2010.

**BACKGROUND**

This application was filed under 35 U.S.C. 371 and as such is subject to PCT unity of invention practice.

Applicant filed a claim set on June 1, 2006 which was subject to a restriction requirement on May 2, 2008.

In the restriction requirement of May 2, 2008, the examiner presented the following groups:

Groups 1-4. Claims 1, 6-33, 71-75 and 84-85, drawn to method of making catalytic antibodies using a covalently reactive transition state antigen (pCRA of formula 1) analog wherein component L in pCRA is in groups 1 amino acid residue, group a sugar residue, group 3 nucleotide residue and group 4fatty acid residue.

Groups 5-8. Claims 2-5, drawn to a covalently reactive transition state antigen (pCRA) analog wherein component L comprises amino acid residue in group 5 sugar residue sugar residue in group 6 so on.

Groups 9-12. Clais 34-37, 51-52, drawn to monoclonal antibodies using pCRA of groups 5-8.

Groups 13-16. Claims 38-50, 53-66, drawn to method of making antibodies of groups 9-12.

Groups 17-20. Claims 67-68, drawn to method of improving catalytic activity of antibody using vectors containing pCRA of groups 5-8.

Groups 21-24. Claims 69-70, drawn to method of passively immunizing a patient by administering a catalytic antibody of grops 5-8.

Groups 25-28. Claims 76-78, method of stimulating production of antibodies in an organism administering antigen comprising pCRA of groups 5-8.

The examiner stated: The inventions listed in Groups 1-32 do not relate to a single general inventive concept under PCT Rule 13.1, because, under PCT Rule 13.2, they lack the same or corresponding special feature linking groups 1-32, pCRA antigen, does not constitute a "special technical feature" as defined by PCT Rule 13.2 because it does not claim a feature which defines a contribution over the prior art as said antigen is taught by Taguchi et al. (Biorg Med. Chem, 2002, 12:3167-3170).

On October 1, 2008, applicants elected Group 1, claims 1, 6-33 and 71-75 and traversed both the requirement for election of claims and the requirement for election of a species for component "L" in the Group 1 claims. Applicants responded that the special feature linking Groups 1-32 is the conformational flexibility of the pCRA and pCRAW antigens. Applicants stated that this unifying special technical feature is essential for coordinated alignment of the electrophillic and noncovalent binding sites of the antibody (PP 0010).

On January 30, 2009, a non-final Office action was issued. The examiner maintained that claims 1-85 are not linked by a special technical feature because of the disclosure in Taguchi et al. The examiner rejected claims 1, 8-14, 16, 24 and 31 under 102(a) and withdrew claims 2-5, 34-70 and 76-85. The examiner made restriction Final.

On July 30, 2009, a response was filed. Applicants amended the claims to limit the antigenic determinant L1...Lx...Lm of the pCRA to peptide or protein and to clarify that L' is a side chain functional group of the amino acid Lx. Applicants urged that Taguchi et al is restricted to a small peptide antigen in which the electrophile is located at the C-terminus.

On October 28, 2009, a non-final Office action was mailed. Examiner maintained the 102(a) rejection over Taguchi et al.

On April 28, 2010, a response was filed. Applicants further amended the claims and urged that the pCRA of the instant amended independent claim I and the conformational flexibility resulting from the structural arrangement provide the unity feature of the claims.

On May 11, 2010, the present petition was filed requesting reconsider the restriction.

**DISCUSSION**

The prosecution history has been carefully reviewed.

Applicants urged that the inventive concept in the claims is the Y'-Y"-Y' component contains a flexible electrophile Y that forms a full or partial covalent bond with the nucleophile of the antibody as defined in Paragraph 0087 of the instant specification. The reaction is coordinated with non-covalent binding between the antibody and the antigene determinant. Applicants emphatically stated that the CRA in Taguchi et al is distinctly not identical to the pCRA/pCRAW in applicant's claims. Applicants pointed out that Taguchi et al is limited to a linear electrophillic epitope composed of contiguous amino acids an the electrophile I the CRA of Taguchi et al is not located at the functional group of an amino acid as in applicant's pCRA. Applicants provided more detailed arguments that had been provided in their response dated 4/28/10. All the arguments have been considered. Taguchi et al do not teach applicants' pCRA or pCRAW and, therefore, cannot teach applicants' special technical feature of the flexible Y"...Y'...Y electrophile.

**DECISION**

The petition is **GRANTED** for the reasons set forth above.

The application is being forwarded to examiner for further evaluation of Unity of Invention after mailing of this decision.

Should there be any questions about this decision, please contact Supervisory Patent examiner Cecilia Tsang, by letter addressed to Director, Technology Center 1600, at the address listed above, or by telephone at 571-272-0562 or by facsimile sent to the general Office facsimile number, 571-273-8300.

JMStone

Jacqueline Stone
Director, Technology Center 1600